Chairmen Doyle and Reed, Ranking Members Formica and Ackert, and Members of the Committee, my name is Brendan Reed and I work as Deputy Director of Policy and Electricity Markets for SolarCity, the nation's leading installer of rooftop solar. I'm here today in support of HB 6435: An Act Concerning Streamlining the Permitting Process for the Installation of Solar Photovoltaic Systems. Before I start, I want to mention that we are working with the Connecticut Council of Municipalities and the Connecticut Council of Small Towns on this initiative and that their support is key to our work. While the goal of what we are proposing today is to shorten project turnaround times for solar companies, it is also to help towns and other municipalities better handle the increased volume of permit applications.

Connecticut's solar industry is booming. I'm literally here on behalf of the 160 SolarCity employees in our Hartford warehouse who want to build more solar. However I like to think that I'm here on behalf of the entire Connecticut solar industry, which according to the newly-released Solar Foundation Jobs Census, grew by 45% last year to 1,600 people. Nationwide the solar industry is adding jobs roughly 20 times faster than the overall economy.

Much of this growth is due to the manpower-intensive nature of the job: you need lots of sales representatives, site auditors, engineers, electricians, crew leads and installers to build solar projects and handle the demand we see in Connecticut and around the country. Seemingly everyone these days is interested in producing their own clean energy and reducing their dependence on utilities. Here in Connecticut the demand for rooftop solar is reaching new levels. Governor Malloy's announcement last week proposes increasing the state's target for rooftop solar to 300MW by 2022, about ten times the current goal for the state.

But there's a problem. The permitting and inspection process significantly bogs down our ability to build and, consequently, hire as fast as we'd like. In rooftop solar today it takes days – if not hours – to sell and design a system. Installations normally happen in less than a day. However, permitting and inspection can take months. In Connecticut today, on average, it takes 136 days from the time we submit for a permit to when our customer has received a final inspection and can turn their system on. In other words, after excitedly signing up for solar panels, a typical customer spends four months wondering where they are.

Much of this delay stems from the differing permitting and inspection requirements of Connecticut's 169 towns. But I am not here today to rail against towns or inefficient processes or a lack of resources. In fact, we get it. How can we expect a town to go from processing 10 solar permits/week to 100 permits/week with no increase in staff or budget? Furthermore, solar is still a relatively new technology for many building inspectors, whose job above all else is to ensure that construction projects are done safely and to code. These are completely valid issues. Surely though, there is a way to streamline the solar permit process in a way that supports a fast-growing industry and also assists towns with managing the surge in demand.

The bill I am supporting today does that. First, let me acknowledge that we are not attempting to reinvent the wheel. Many of the recommendations we make in our bill come from the Connecticut Rooftop Solar Permitting Guide, which was published last year and includes resources, recommendations and other best practices for local municipalities to streamline their permitting process. This guide is noteworthy because — along with contributions from installers, utilities, non-profits and relevant government agencies — it includes input from 22 Connecticut towns and the state building inspector. These best practices have been blessed by all the relevant stakeholders involved in the planning and building of a rooftop solar project.

What we are proposing involves the creation of an "expedited review process" for small solar projects that meet certain qualifications. The vast majority of rooftop projects are "cookie cutter" in nature and an expedited process will allow for towns to quickly sign off and focus their time and resources on more complicated projects. So for example, if a project falls under the designated system size, is being built on a standard single-family dwelling and meets all applicable town code, it would be eligible for an expedited review and would be permitted and inspected in a set number of days. The idea is to help both parties involved – decreasing project turnaround time for the installers, and lowering the stack of papers at the local building department.

We are also calling for the implementation of a flat solar permit fee. To be clear, we are not looking to reduce revenues towns count on through permit fees. Rather, we look to alter the process by which permit fees are determined. Most towns use a system of project valuation to determine fee amounts – for example, if your project costs \$15,000 your fee is \$300. The problem is that there are solar installers of many shapes and sizes in Connecticut, all of whom have different costs for labor, construction and financing. With the implementation of cookie cutter projects, the fees should more align with the cost of actually permitting and inspecting the project, which would allow installers to more quickly turn around projects and avoid the back-and-forth of what the projects actually "costs."

Other recommendations include the ability to submit permit applications electronically, requiring only one final inspection and limiting the ability of Home Owner's Associations to unreasonably impose restrictions on citizens who want to install solar. Many large, revenue-producing industries these days that include personal information such as taxes and mortgages are signed and submitted electronically and we feel the same should apply to a solar permit that generates a few hundred dollars. With inspections, requiring one final inspection that gives a straight yes-or-no will reduce the time inspectors take travelling to job sites and free them up to focus on larger, more complex projects. Finally, we believe everyone should have a right to install solar on their own property. Choosing to live in a neighborhood that has ordinances decided by a Home Owner's Association is a decision one makes, and that's fair. So what we are suggesting is the HOA may not decide to alter your system design if it will result in more than a 10% production loss, and they have 30 days to make their decision.

Finally, enacting an expedited review process will require further and continuing education for building department staff on how solar technology works. What it looks like. How it's attached. We are committed to hosting and/or sponsoring trainings across Connecticut so that inspectors and other staff can become more familiar with our technology. It's in both the interest of the installers and building departments to get together and talk about what we are seeing in the field. At SolarCity, we've hosted a number of these training sessions across the Northeast; it's amazing what happens when you get together to just discuss or have a Q&A session versus when a job is on the line.

At the end of the day, we believe there is a process to enact a more streamlined solar permitting process that benefits both the installers and the towns. The only answer to a question on process that I find 100% unacceptable is, "because we've always done it that way." We are open to discussion. But addressing this issue now is extremely important if the priority is to support an industry that continues to hire. Connecticut has an opportunity to lead — no state besides California has passed solar permit legislation — and become a model for how to quickly build solar while still adhering to all relevant safety and code compliance measures. Thank you very much for your time and I look forward to further discussion.

Section 8-2X. (NEW) Permitting of Small Residential Rooftop Solar PV Systems

[Sec. 8-2X. Renewable energy sources generation. Permitting of Small Residential Rooftop Solar PV Systems.

- (a) The following definitions apply to this Section:
- (1) "Electronic Submittal" means the utilization of one or more of the following: (A) email, (B) internet, or (C) facsimile.
- (2) "Expedited Review" means no more than five business days from the time an application to request a permit for a Small Residential Rooftop Solar PV System is turned into the municipality having jurisdiction.
- (3) "Feasible Method To Satisfactorily Mitigate Or Avoid The Specific, Adverse Impact" means any cost-effective method, condition, or mitigation imposed by a municipality in another similarly situated application in a prior successful application for a permit.
- (4) "Small Residential Rooftop Solar PV System" means all of the following: (A) A solar PV system that is no larger than 12 kilowatts alternating current nameplate rating, (B) A solar PV system that conforms to all applicable state fire, structural, electrical, and other building codes, (C) A solar PV system that is installed on a single or duplex family dwelling, and (D) A solar PV panel or module array that does not exceed the maximum legal building height as defined by the municipality having jurisdiction.
- (5) "Specific, Adverse Impact" means a significant, quantifiable, direct, and unavoidable impact, based on objective, identified, and written public health or safety standards, policies, or conditions as they existed on the date the application was deemed complete.
- (b) (1) On or before January 1, 2016, every municipality in consultation with the local fire department shall adopt an ordinance, consistent with the goals and intent of this Section that creates an expedited, streamlined and transparent permitting process for Small Residential Rooftop Solar PV Systems. In developing an expedited permitting process, the municipality shall adopt a checklist of all requirements with which Small Residential Rooftop Solar PV Systems shall comply to be eligible for Expedited Review. An application that satisfies the information requirements in the checklist, as determined by the municipality shall be deemed complete. Upon confirmation by the municipality of the application and supporting documents being complete and meeting the requirements of the checklist, and consistent with the ordinance, a municipality shall, consistent with this statute, approve the application and issue all required permits or authorizations. Upon receipt of an incomplete application, a municipality shall issue a written correction notice detailing all deficiencies in the application and any additional information required to be eligible for expedited permit issuance; and (2) The checklist and required permitting documentation shall be published on a publically accessible internet web site, if the municipality has an internet web site, and (3) the municipality shall allow for Electronic Submittal of a permit application and associated documentation, and (4) shall authorize the electronic signature on all forms, applications, and other documentation in lieu of a wet signature by an applicant. In developing the ordinance, the municipality shall substantially conform its expedited, streamlined permitting process to the recommendations for expedited permitting, including the checklists and standard plans contained in the most current version of the Energize Connecticut, Connecticut Rooftop Solar PV Permitting Guide first published on May 1, 2014. Any ordinance for permitting Small Residential Rooftop Solar PV Systems shall include a flat fee on no more than \$200 unless the

municipality decides to waive the permitting fee pursuant to Section 29-263 of the Connecticut General Statutes.

- (c) For a Small Residential Rooftop Solar PV System eligible for Expedited Review, only one inspection shall be required, which shall be done within three business days and may include a consolidated inspection, except that a separate fire safety inspection may be performed in a municipality that does not have an agreement with a local fire authority to conduct a fire safety inspection on behalf of the fire authority.
- (d) A Small Residential Rooftop Solar PV System for producing electricity shall meet all applicable safety and performance standards established by the Connecticut Electrical Code, the Institute of Electrical and Electronics Engineers, and accredited testing laboratories such as Underwriters Laboratories and, where applicable, rules and regulations of the Connecticut Public Utilities Regulatory Authority regarding safety and reliability.
- (e) A municipality shall administratively approve applications to install Small Residential Rooftop Solar PV Systems through the issuance of a building permit or similar nondiscretionary permit. Review of the application to install a Small Residential Rooftop Solar PV System shall be limited to the building official's review of whether it meets all health and safety requirements of local, state, and federal law. The requirements of local law shall be limited to those standards and regulations necessary to ensure that the Small Residential Rooftop Solar PV System will not have a Specific, Adverse Impact upon the public health or safety. However, if the building official of the municipality makes a finding, based on substantial evidence, that the Small Residential Rooftop Solar PV System could have a Specific, Adverse Impact upon the public health and safety, the municipality may require the applicant to apply for a use permit.
- (f) A municipality may not deny an application for a use permit to install a Small Residential Rooftop Solar PV System unless it makes written findings based upon substantial evidence in the record that the proposed Small Residential Rooftop Solar PV System would have a Specific, Adverse Impact upon the public health or safety, and there is no Feasible Method To Satisfactorily Mitigate Or Avoid the Specific, Adverse Impact. The findings shall include the basis for the rejection of potential feasible alternatives of preventing the Specific, Adverse Impact.
- (g) Any conditions imposed on an application to install a Small Residential Rooftop Solar PV System shall be designed to mitigate the Specific, Adverse Impact upon the public health and safety at the lowest cost possible.
- (h) A Small Residential Rooftop Solar PV System for producing electricity shall meet all applicable safety and performance standards established by the Connecticut Electrical Code.
- (i) Any covenant, restriction, or condition contained in any deed, contract, security instrument, or other instrument affecting the transfer or sale of, or any interest in, real property, and any provision of a governing document that effectively prohibits or restricts the installation or use of a Small Residential Rooftop Solar PV System is void and unenforceable. This section does not apply to provisions that impose reasonable restrictions on Small Residential Rooftop Solar PV System. Reasonable restrictions on a Small Residential Rooftop Solar PV System are those restrictions that do not significantly increase the cost of the Small Residential Rooftop Solar PV System or significantly decrease its efficiency or specified performance, or that allow for an alternative Small Residential Rooftop Solar PV System of comparable cost and efficiency. Homeowners Associations or substantially similar entities must either approve or deny an application for the installation of a Residential Rooftop Solar PV System within 30 business days of receipt of an application or the

application shall be deemed approved. A Homeowners Association shall not alter a PV design that results in a greater than ten percent loss of production from the Small Residential Rooftop Solar PV System.

(j) Municipalities shall implement this Section within available appropriations.]

## Purpose:

The proposed language is intended to create an expedited, streamlined and transparent permitting process for Small Residential Rooftop Solar PV Systems in Connecticut.